



FluidMaths

Year 2 (A-Level)

Algebraic Methods – Set 2

The marks shown are for guidance purposes only

When not specified, round all non-terminating decimals to 3 significant figures where applicable

2

Show that $\frac{\sqrt{x^3+x^2}\sqrt{x}}{\sqrt{x^3}}$ can be written as $x^n + 1$

Where n is an integer

[6marks]

3

Give that
$$\frac{px+3}{(x+2)(x^2+4x+5)} = -\frac{1}{x+2} + \frac{qx+r}{x^2+4x+5}$$

Find the values of the constants $p, q, \text{ and } r$ **[8marks]**

A blank sheet of lined paper with a vertical margin on the left and horizontal ruling lines for writing. The paper is enclosed in a black border. The left margin is a narrow vertical strip. The main body of the page is filled with horizontal lines, spaced evenly, providing a guide for writing. There are 28 horizontal lines in total, including the top and bottom lines of the page.

Lined writing paper template with 30 horizontal lines and a vertical margin line on the left side.

A blank sheet of lined paper with a vertical margin on the left and horizontal ruling lines for writing. The paper is enclosed in a black border. The left margin is a narrow vertical strip. The main body of the page is filled with horizontal lines, spaced evenly, suitable for writing or drawing.

